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SUPERCHARGED MOTORCYCLE

Abstract

A supercharged motorcycle (10) configured for mounted operation by a rider (R) is disclosed. The supercharged motorcycle (10) broadly includes a motorcycle (12) and an air induction system (14) configured to deliver compressed induction fluid to the intake manifold (48) of the motorcycle's engine (18). The air induction system (14) broadly includes an air intake assembly (62) for receiving ambient air and delivering it downstream, a supercharger (64) in downstream communication with the air intake assembly (62) for compressing the air, an air delivery assembly (66) for delivering the compressed air to the engine (18), and a drive assembly (68) for powering the supercharger (64) off of the drive train (44). The entire air induction system (14) is positioned entirely outside of the leg-receiving areas (ALR) defined by the motorcycle (12) so as to not engage the rider's legs (L) and feet (F), when the rider (R) is mounted on the seat (34) in the normal operating position. Driving the air induction system (14) off of one or more components of the drive train (44) cooperates with the forward positioning of the supercharger (64) and the sleek configuration

of the drive assembly (68) extending there between to provide an air induction system (14) that does not undesirably alter the overall appearance or sound of the motorcycle 12 and does not interfere with the preferred operation thereof as is preferred by motorcycle riders, particularly Harley-Davidson® riders. A preferred alternative embodiment of the power take-off subassembly for an air induction system for a supercharged motorcycle is also disclosed in the supercharged motorcycle (400). The motorcycle (400) includes a breakaway coupler assembly (408) that enables the motorcycle's drive train to continue operation in the event of catastrophic failure of the air induction system.